fee are being filed concurrently with this amendment. A Notice of Appeal was due on January 1, 2003.

Please amend the application as follows:

In the Claims

Please cancel Claims 85-96, 98-99, 102-106, 108-109, 112-117 and 119-123.

Please amend Claims 82 and 118. Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages i - ii).

82. (Amended) A method for identifying an agent which is an inhibitor of FATP1, comprising the steps of:

(a) introducing into cells one or more vectors comprising a gene encoding a cell surface protein and a nucleic acid encoding FATP1 comprising the amino acid sequence of SEQ ID NO:25;

(b) contacting the host cells with anti-cell surface protein antibody and labeled fatty acid substrate of FATP1;

(c) contacting a first aliquot of the host cells with an agent being tested as an inhibitor of FATP1, while leaving a second aliquot of the host cells uncontacted with the agent;

(d) identifying, in the first and second aliquots, the host cells expressing the cell surface protein by detecting the anti-cell surface protein antibody bound to the host cells; and

(e) measuring, in the first and second aliquots, uptake of the fatty acid substrate of the host cells identified as expressing the cell surface protein;

wherein less uptake of the fatty acid substrate in the first aliquot compared to the second aliquot is indicative that the agent is an inhibitor of FATP1.

10

118. (Amended) A method for identifying an agent which is an inhibitor of fatty acid uptake by a FATP comprising the amino acid sequence of SEQ ID NO:25, comprising the steps of:

a) maintaining test cells expressing said FATP in the presence of a complex of a fatty acid and an agent to be tested as an inhibitor of fatty acid uptake;

b) measuring uptake of the complex in the test cells; and

c) comparing uptake of the complex in the test cells with uptake of the complex in suitable control cells;

wherein lower uptake of the complex in the test cells compared to uptake of the complex in the control cells is indicative that the agent is an inhibitor of fatty acid uptake by said protein.

C2

Please add new Claims 124-139.

11

--- 124. (NEW) The method of Claim 100, 5 wherein the protein has an amino acid sequence at least about 95% identical to the amino acid sequence of SEQ ID NO:25.

12 6

125. (NEW) The method of Claim 101, wherein the protein has an amino acid sequence at least about 95% identical to the amino acid sequence of SEQ ID NO:25.

C3

13 8

126. (NEW) The method of Claim 110, wherein the protein has an amino acid sequence at least about 95% identical to the amino acid sequence of SEQ ID NO:25.

14 9

127. (NEW) The method of Claim 111, wherein the protein has an amino acid sequence at least about 95% identical to the amino acid sequence of SEQ ID NO:25.

15

128. (NEW) A method for identifying an agent which is an inhibitor of fatty acid uptake by a protein, said protein having FATP1 activity and encoded by a polynucleotide which hybridizes to a complement of the polynucleotide of SEQ ID NO: 24 under stringent

conditions comprising incubation in 6X SSC at 65°C, followed by two or more washes in 0.2X SSC/0.5% SDS at 65°C, comprising the steps of:

a) maintaining test cells expressing said FATP in the presence of a complex of a fatty acid and an agent to be tested as an inhibitor of fatty acid uptake;

b) measuring uptake of the complex in the test cells; and

c) comparing uptake of the complex in the test cells with uptake of the complex in suitable control cells;

wherein lower uptake of the complex in the test cells compared to uptake of the complex in the control cells is indicative that the agent is an inhibitor of fatty acid uptake by said protein.

C3

129. (NEW) The method of Claim ~~128~~ 15, wherein the protein has an amino acid sequence at least about 95% identical to the amino acid sequence of SEQ ID NO:25.

D2

130. (NEW) A method for identifying an agent which is an inhibitor of fatty acid uptake by a protein, said protein having FATP1 activity and encoded by a polynucleotide which hybridizes to a complement of the polynucleotide of SEQ ID NO: 24 under stringent conditions comprising incubation in 6X SSC at 65°C, followed by two or more washes in 0.2X SSC/0.5% SDS at 65°C, comprising the steps of:

(a) introducing into cells one or more vectors comprising a gene encoding a cell surface protein and a nucleic acid encoding FATP1 comprising the amino acid sequence of SEQ ID NO:25;

(b) contacting the host cells with anti-cell surface protein antibody and labeled fatty acid substrate of FATP1;

(c) contacting a first aliquot of the host cells with an agent being tested as an inhibitor of FATP1, while leaving a second aliquot of the host cells uncontacted with the agent;

(d) identifying, in the first and second aliquots, the host cells expressing the cell surface protein by detecting the anti-cell surface protein antibody bound to the host cells; and

(e) measuring, in the first and second aliquots, uptake of the fatty acid substrate of the host cells identified as expressing the cell surface protein;

wherein less uptake of the fatty acid substrate in the first aliquot compared to the second aliquot is indicative that the agent is an inhibitor of FATP1.

131. (NEW) The method of Claim 130, wherein the cell surface protein is CD2.

132. (NEW) The method of Claim 130, wherein the fatty acid substrate is BODIPY-labeled.

133. (NEW) The method of Claim 130, wherein the protein has an amino acid sequence at least about 95% identical to the amino acid sequence of SEQ ID NO:25.

134. (NEW) A method for identifying an agent which is an inhibitor of fatty acid uptake by a protein, said protein having FATP1 activity and encoded by a polynucleotide which hybridizes to a complement of the polynucleotide of SEQ ID NO: 46 under stringent conditions comprising incubation in 6X SSC at 65°C, followed by two or more washes in 0.2X SSC/0.5% SDS at 65°C, comprising the steps of:

a) maintaining test cells expressing said FATP in the presence of a complex of a fatty acid and an agent to be tested as an inhibitor of fatty acid uptake;

b) measuring uptake of the complex in the test cells; and

c) comparing uptake of the complex in the test cells with uptake of the complex in suitable control cells;

wherein lower uptake of the complex in the test cells compared to uptake of the complex in the control cells is indicative that the agent is an inhibitor of fatty acid uptake by said protein.

135. (NEW) The method of Claim 134, wherein the protein has an amino acid sequence at least about 95% identical to the amino acid sequence of SEQ ID NO:25.

136. (NEW) A method for identifying an agent which is an inhibitor of fatty acid uptake by a protein, said protein having FATP1 activity and encoded by a polynucleotide which hybridizes to a complement of the polynucleotide of SEQ ID NO: 46 under stringent conditions comprising incubation in 6X SSC at 65°C, followed by two or more washes in 0.2X SSC/0.5% SDS at 65°C, comprising the steps of:

(a) introducing into cells one or more vectors comprising a gene encoding a cell surface protein and a nucleic acid encoding FATP1 comprising the amino acid sequence of SEQ ID NO:25;

(b) contacting the host cells with anti-cell surface protein antibody and labeled fatty acid substrate of FATP1;

(c) contacting a first aliquot of the host cells with an agent being tested as an inhibitor of FATP1, while leaving a second aliquot of the host cells uncontacted with the agent;

(d) identifying, in the first and second aliquots, the host cells expressing the cell surface protein by detecting the anti-cell surface protein antibody bound to the host cells; and

(e) measuring, in the first and second aliquots, uptake of the fatty acid substrate of the host cells identified as expressing the cell surface protein;

wherein less uptake of the fatty acid substrate in the first aliquot compared to the second aliquot is indicative that the agent is an inhibitor of FATP1.

137. (NEW) The method of Claim 136, wherein the cell surface protein is CD2.

138. (NEW) The method of Claim 136, wherein the fatty acid substrate is BODIPY-labeled.

139. (NEW) The method of Claim 136, wherein the protein has an amino acid sequence at least about 95% identical to the amino acid sequence of SEQ ID NO:25. - - -